

IN THE CLAIMS:

1-19 (Cancelled)

20. (new) A method to generate a print image on a carrier material, comprising the steps of:

5 applying a wetting-aiding substance with a molecular layer thickness on a surface of the print carrier, and using as the wetting-aiding substance a surfactant with hydrophilic molecule sections, a layer thickness for the wetting-aiding substance being smaller than about 0.1 μm ;

10 coating the wetting-aiding substance on the surface of the print carrier with a layer which is one of ink-repelling and ink-attracting, said layer being made from a fountain solution;

 in a structuring process of said fountain solution layer, generating ink-attracting regions and ink-repelling regions corresponding to a structure of the print image to be printed;

15 applying ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions;

 transferring the applied ink onto the carrier material; and

 before a new structuring process on the same surface of the print carrier, cleaning and re-coating the surface with said fountain solution layer.

20 21. (new) A method according to claim 21 wherein said fountain solution layer is ink-repelling and the fountain solution is based on water.

 22. (new) A method according to claim 21 wherein the fountain solution layer is ink-repelling and a layer thickness of the ink-repelling layer is small than 1 μm .

23. (new) A method according to claim 21 wherein the surface of the print carrier has a roughness that is smaller than a roughness used in a standard offset printing method.

5 24. (new) A method according to claim 23 wherein an average roughness of the surface is smaller than 10 μm .

25. (new) A method according to claim 23 wherein an average roughness of the surface of the print carrier is smaller than 2 μm .

26. (new) A method according to claim 21 wherein digitally-controlled radiation is used for the structuring.

10 27. (new) A method according to claim 26 wherein the radiation is at least one of a laser system, a laser, laser diodes, LEDs and a laser diode array for the structuring.

28. (new) A method according to claim 21 wherein a plurality of printing events occur before a restructuring of the surface, and the print carrier
15 is inked multiple successive times.

29. (new) A method according to claim 21 wherein the surface of the print carrier comprises one of a continuous band and a generated cylinder surface.

30. (new) A method according to claim 21 wherein an ink
20 separation occurs before the transfer of the ink onto the carrier material.

31. (new) A device to generate a print image on a carrier material, comprising:

a pre-treatment station which applies a wetting-aiding substance in molecular layer thickness on a surface of a print carrier, a surfactant with
25 hydrophilic molecule sections being used as the wetting-aiding substance, and a layer thickness for the wetting-aiding substance being smaller than about 0.1 μm ;

a fountain solution application station which coats the surfactant on the surface of the print carrier with a layer which is one of ink-repelling and ink-attracting, said layer comprising a fountain solution;

5 an image generation station which structures the fountain solution layer with ink-attracting regions and ink-repelling regions corresponding to a structure of the print image to be printed, ink adhering to the ink-attracting regions and not absorbed by the ink-repelling regions;

a transfer printing station at which the ink is transferred onto a carrier material; and

10 before a new structuring on the same surface of the print carrier, a cleaning station which cleans the surface of the print carrier.

32. (new) A device according to claim 31 wherein the fountain solution layer is ink-repelling, the fountain solution is based on water as an ink-repelling layer.

15 33. (new) A device according to claim 31 wherein the fountain solution layer is ink-repelling and a thickness of the layer is smaller than 1 μm .

34. (new) A device according to claim 31 wherein the surface of the print carrier has a roughness that is smaller than a roughness used in a standard offset printing method.

20 35. (new) A device according to claim 34 wherein an average roughness of the surface is smaller than 10 μm .

36. (new) A device according to claim 34 wherein an average roughness of the surface of the print carrier is smaller than 2 μm .

25 37. (new) A device according to claim 31 wherein digitally-controlled radiation is used for the structuring.

38. (new) A device according to claim 37 wherein radiation of at least one of a laser system, a laser, laser diodes, LEDs and a laser diode array is used.

5 39. (new) A method to generate a print image on a carrier material, comprising the steps of:

applying a wetting-aiding substance with a molecular layer thickness on a surface of the print carrier, using as the wetting-aiding substance a surfactant with hydrophilic molecule sections, and a layer thickness for the wetting-aiding substance being smaller than $0.1\text{ }\mu\text{m}$;

10 in a structuring process, generating at the surfactant regions used for forming ink-attracting regions and ink-repelling regions corresponding to a structure of the print image to be printed;

15 coating the surfactant on the surface of the print carrier with a layer which is one of ink-repelling and ink-attracting, said layer being made from a fountain solution, and forming said ink-attracting and ink-repelling regions;

applying on the fountain solution layer ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions;

transferring the applied ink onto the carrier material; and

20 before a new structuring process on the same surface of the print carrier, cleaning and re-coating the surface with said fountain solution layer.

40. (new) A method according to claim 39 wherein said fountain solution layer is ink-repelling and the fountain solution is based on water.

25 41. (new) A method according to claim 39 wherein the fountain solution layer is ink-repelling and a layer thickness of the ink-repelling layer is smaller than $1\text{ }\mu\text{m}$.

42. (new) A method according to claim 39 wherein the surface of the print carrier has a roughness that is smaller than a roughness used in a standard offset printing method.

5 43. (new) A method according to claim 42 wherein an average roughness is smaller than 10 μm .

44. (new) A method according to claim 42 wherein an average roughness of the surface of the print carrier is smaller than 2 μm .

45. (new) A method according to claim 39 wherein digitally-controlled radiation is used for the structuring.

10 46. (new) A method according to claim 45 wherein the radiation of at least one of a laser system, a laser, laser diodes, LEDs and a laser diode array is used.

15 47. (new) A method according to claim 39 wherein a plurality of printing events occurs before a restructuring of the surface, and the print carrier is inked multiple successive times.

48. (new) A method according to claim 39 wherein the surface of the print carrier comprises one of a continuous band and a generated cylinder surface.

20 49. (new) A method according to claim 39 wherein an ink separation occurs before the transfer of the ink onto the carrier material.

50. (new) A device to generate a print image on a carrier material, comprising:

25 a pre-treatment station which applies a wetting-aiding substance in molecular layer thickness on a surface of a print carrier, a surfactant with hydrophilic molecule sections being used as the wetting-aiding substance, and a layer thickness for the wetting-aiding substance being smaller than about 0.1 μm ;

an image generation station which structures the surfactant to create regions used for forming ink-repelling regions corresponding to a structure of the print image to be printed;

5 a fountain solution application station which coats the surfactant on the surface of the print carrier with a layer which is one of ink-repelling and ink-attracting, said layer comprising a fountain solution, and forming said ink-attracting and ink-repelling regions;

ink adhering to the ink-attracting regions and not absorbed by the ink-repelling regions;

10 a transfer printing station at which the ink is transferred onto a carrier material; and

before a new structuring on the same surface of the print carrier, a cleaning station which cleans the surface of the print carrier.

51. (new) A device according to claim 50 wherein the fountain
15 solution layer is ink-repelling, the fountain solution is based on water as an ink-repelling layer.

52. (new) A device according to claim 50 wherein the fountain solution layer is ink-repelling and a thickness of the layer is smaller than 1 μm .

53. (new) A device according to claim 50 wherein the surface of the
20 print carrier has a roughness that is smaller than a roughness used in a standard offset printing method.

54. (new) A device according to claim 53 wherein an average roughness of the surface is smaller than 10 μm .

55. (new) A device according to claim 53 wherein an average
25 roughness of the surface of the print carrier is small than 2 μm .

56. (new) A device according to claim 50 wherein digitally-controlled radiation is used for the structuring.

57. (new) A device according to claim 56 wherein radiation of at least one of a laser system, a laser, laser diodes, LEDs and a laser diode array is used.